

THE ANNALS
AND
MAGAZINE OF NATURAL HISTORY.

No. 85. MAY 1844.

XXXVII.—*Description of a new species of Codium recently discovered on the west coast of Ireland.* By WILLIAM HENRY HARVEY, Esq.

[With a Plate.]

To the Editors of the Annals of Natural History.

GENTLEMEN,

HAVING just received from my friend Mr. David Moore, of the Glasnevin Botanic Gardens, a specimen of a remarkable new species of *Codium* lately added to the Irish flora, with a request that I should make it known to the public, I lose no time, as the best means of meeting his wishes, in forwarding to you a drawing and description of it, and hope that you may find room for this notice in an early number.

The following character will abundantly distinguish it:—

Codium amphibium, Moore; frondibus minutis, erectis, cylindraceis vel subclavatis, simplicibus, obtusis, in strato late effuso aggregatis.

Hab. On turfy banks at extreme high-water mark, near Roundstone, county Galway, *Mr. Wm. M'Calla*.

Fronde rising from a mass of entangled, divaricately branched fibres, densely aggregated into widely spreading patches, but not woven together in a continuous mass (each little frond being distinct in itself), from a line to nearly a quarter of an inch in length, and from a quarter to half a line in diameter, erect, cylindrical or somewhat club-shaped, obtuse, simple; the *axis* composed of branched, interwoven fibres, which throw off to the circumference club-shaped ramuli, of precisely the same nature and nearly the same form as those of *C. tomentosum*. Towards the base of the frond these ramuli are less abundant, and there the entangled fibres which compose the centre are more apparent: towards the apex nothing is seen, under the microscope, but the clavate tips of the radiating ramuli, closely set together, giving that part, as Mr. Moore observes, the appearance of "a small pickling cucumber." The *colour* is much faded in my specimen, and the endochrome nearly destroyed, but traces of a rich grass-green remain on some fronds. The *fructification*, as yet unknown, will probably be very similar to that of *C. tomentosum*.

Ann. & Mag. N. Hist. Vol. xiii.

Y

Accompanying the specimen, Mr. Moore has favoured me with the following note:—"My first knowledge of this plant was obtained in October 1843, when Mr. M'Calla inclosed me a small specimen, requesting my opinion of it; on which I examined it, and by return of post wrote him that he was perfectly correct in supposing he had found a new species of *Codium*. In his letter he says, 'I found this remarkable plant last year, and from its habit and situation took it at first to be a sponge, but after examining it better, came to the conclusion that it was a *Codium*, in which opinion I have no doubt you will agree. It grows on turf-banks near or at extreme high-water mark, spreading in large patches to the extent of several yards. In dry weather it loses all its characters, the frond shrinking to a mere nothing, but on the return of moisture it immediately gets fresh again.' Such is M'Calla's account, and you will observe from it that he has both the merit of discovering and ascertaining it to be a species of *Codium*. On the 7th of December I again received fresh specimens, with a view of describing it which was delayed for two reasons: first, thinking I might find it noticed by some foreign author; and secondly, that it might alter its form on the approach of spring, which latter has not been the case with specimens which I placed on a moist spot, where they remain unchanged, though they have now been under my observation upwards of three months. I thought of calling it *C. cucurbitinum*, from the resemblance it bears to a small pickling cucumber under the glass."

The most curious point in the history of this interesting Alga, and which has suggested the specific name by which we have distinguished it, lies in its *habitat*, wherein it differs altogether from any hitherto recorded species of *Codium*, at the same time that its structure is so entirely identical with that of *C. tomentosum* and others of the genus, that it is impossible to place it in any other group. All known *Codia* are not merely marine plants, but are generally found far removed from high-water mark, and in places where they are either not entirely uncovered at low water or are only left bare for a very limited time, while their spongy nature enables them to retain sufficient water to prevent shrivelling. In our *C. amphibium*, however, we find these peculiarities of the genus singularly departed from. It can scarcely be called a *marine*, so much as a *maritime* plant, if it be affected, as would appear by Mr. M'Calla's statement, by the wetness or dryness of the weather. Probably it grows within the limits of spring-tides, but beyond the reach of the ordinary sea-level. It is moreover found growing in bog-earth, and doubtless deriving from the moisture of the bog a portion of its nourishment. In all these respects, as before observed, it differs remarkably from any recorded species.

